



MODEL 141

SINGLE ENGINE FLIGHT SIMULATOR



Standard Model 141 Single Engine Flight Simulator

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The Model 141 Single Engine Flight Simulator is the cornerstone of the Frasca line. Originally designed with the requirements of collegiate aviation programs in mind, the 141 is ideal for flight training, research, and aircraft orientation for the non-pilot. It is this flexibility, combined with a cost effective price, that makes the 141 a wise choice for virtually any training requirement.

SIMULATOR PERFORMANCE

Of course, the most common reason for purchasing a simulator is to support flight training. In that respect it's hard to beat the 141 for its flexibility and performance capability.

Most manufacturers assume they know what type of simulator characteristics are best for your training program. Frasca's philosophy is that you should be able to decide what's best for you. So we make a 141 handle and perform the way we think it should, and then build in eight modifiable Performance Constants Templates so you can make it handle and perform the way you think it should!

That means your simulator can fly like your smallest fixed pitch, fixed gear trainer one minute, and your sleekest constant speed, retractable the next. It also means that you can have more than one set of handling characteristics per airplane.

Let's say your instrument training aircraft is a little bit sensitive on roll. In a 141 you can duplicate its handling characteristics in one template, and dampen the roll rate in another. Now students with a weak instrument scan can build it up to the level of proficiency necessary to handle that sensitive roll characteristic. No frustration, no wasted aircraft time.

Best of all, because the 141 uses the same Computer Generated Simulation (CGS) technology as all 140/240 simulators, it is possible to add options such as a dual needle RMI, HSI, special avionics and Flight Director. See the 140/240 Series Options product information sheet for details.

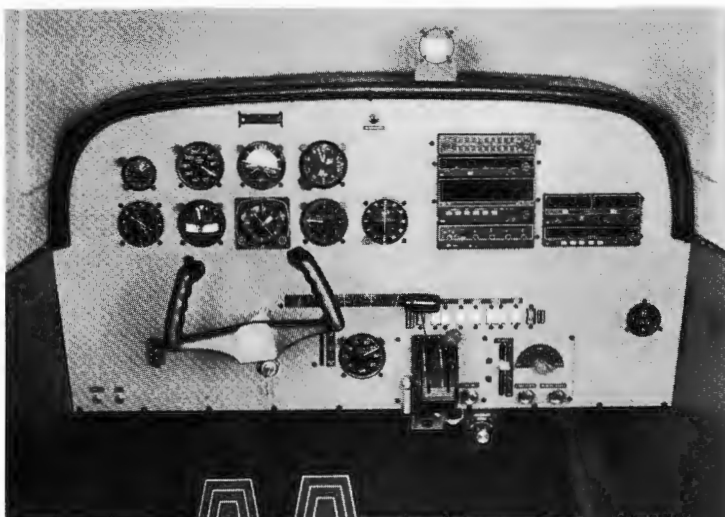
**Leaders
in cost-effective
simulation.**

FLIGHT TRAINING

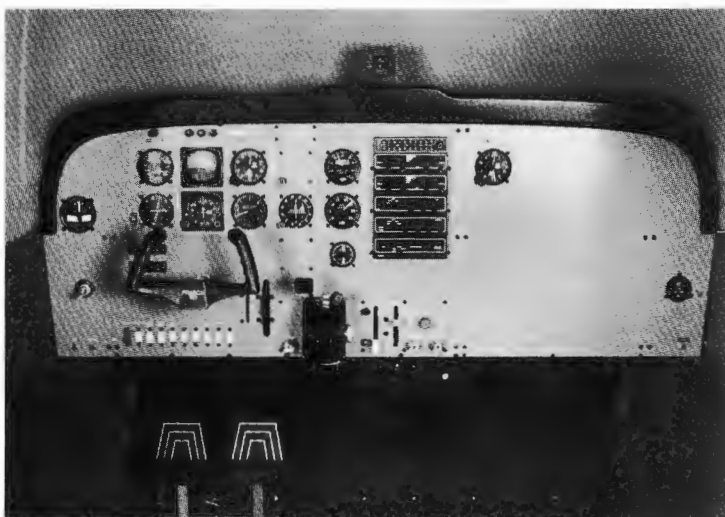
To be cost effective, the 141 is designed to support all types of single engine flight training. The basic Model 141 comes ready to teach any of the following:

- Preflight
- Systems operation
- Systems troubleshooting
- Constant speed prop usage
- Fixed pitch prop usage
- Retractable gear usage
- Engine starting
- Engine troubleshooting
- Communications procedures
- Attitude instrument flying
- Radio navigation
- Stall recognition & recovery
- Mag compass use & errors
- Pitot/static instruments
- Gyro instruments
- Gyroscopic precession
- Takeoff procedures
- Landing procedures
- Cruise performance
- IFR enroute procedures
- IFR terminal procedures

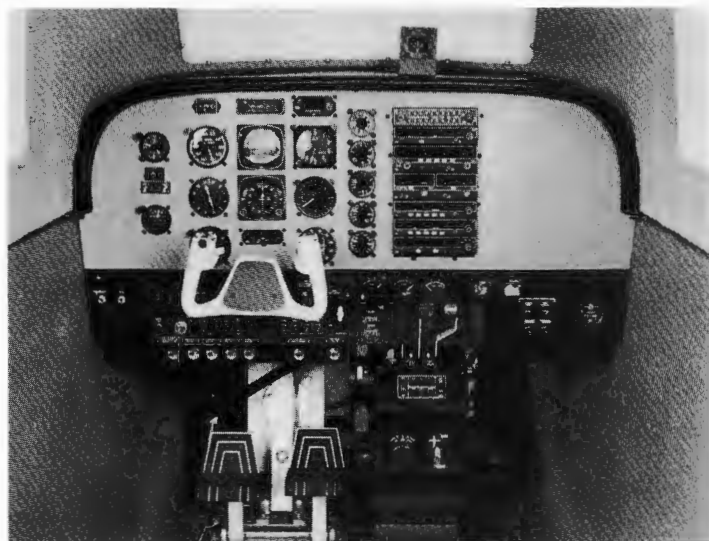
By adding an optional visual system, the 141's training capacity increases dramatically. For the VFR pilot an introduction to taxi, takeoff and landing can be effectively accomplished. More importantly, many ground referenced maneuvers may be practiced in the simulator. For the instrument student it is possible to show what an approach to minimums looks like, something seldom available in the real aircraft.



Model 141 with a custom designed Piper Warrior instrument panel



Model 141 with a custom designed Beechcraft Bonanza instrument panel



Model 141 Wide with optional King KI-525 PNI and KI-229 Dual Needle RMI

SIMULATOR EQUIPMENT LIST

The 141 comes with the standard equipment listed below. Consult the factory for custom panel layout and/or the addition of optional equipment.

- Magnetic compass
- Magneto/starter key switch
- Mic & headphone jacks
- Master switch
- Alternator switch
- Pitot heat switch
- Boost pump switch
- NAV light switch
- Strobe lights switch
- Avionics master switch
- Landing light switch
- Rotating beacon switch
- Fuel quantity indicators
- Fuel pressure indicator
- Oil pressure indicator
- Oil temperature indicator
- Cylinder head temp indicator
- Alternator warning light
- Airspeed indicator
- Attitude indicator
- Altimeter
- Turn & slip indicator
- Heading indicator
- Vertical velocity indicator
- DME
- ADF single needle indicator
- NAV 1 CDI with glideslope
- NAV 2 CDI
- Manifold pressure gauge
- Engine tachometer
- Clock
- KMA 24 audio control panel
- Com 1 transceiver
- Com 2 transceiver
- NAV 1 receiver
- NAV 2 receiver
- ADF receiver
- Transponder (alt encoder)
- Elevator trim indicator
- Elevator trim control
- Carb heat control
- Throttle
- Propeller control
- Mixture control
- Landing gear control
- Landing gear position lights
- Flap control and indicator
- Fuel selector
- Cowl flap control
- Parking brake control
- Control yoke
- Rudder pedals & toe brakes
- Hobbs meter

RESEARCH

It is that same CGS technology that also makes the 141 a favorite for research. Combined with the Computer Interactive Flight Simulation (CIFS) option, the Model 141 allows researchers access to most of the digital variables available from the simulator's host computer. And best of all, it is possible to interface the simulator with any IBM PC compatible equipment. That means manipulating and/or collecting variables, down- or up-loading to a mainframe, task loading, and automatic, external control of the simulator. The possibilities are endless.

POWER REQUIREMENTS

110 VAC or 220 VAC at 60 or 50 Hz. Total power consumption is less than 360 watts.

For further information see the following product information sheets:

- 140/240 Simulators
- 140/240 Options
- Bendix/King Avionics Options
- Visual System